## **Title of Instructional Materials**: Big Ideas

**Grade Level**: Grade 7

## Summary of Insert Name of Instructional Materials Here

Overall Rating:	☐ Weak (1-2) ☐ Moderate (2-3) ☑ Strong (3-4)	Important Mathematical Ideas:	<ul><li>Weak (1-2)</li><li>Moderate (2-3)</li><li>Strong (3-4)</li></ul>
Summary / Justification / Evidence: Excellent text to transition traditional teachers from kill and drill to investigative, real-world problems. Some of the examples are not very interesting for students. The activities are very good in that students are working together and talking about procedures, skills, and justifications. The program is a little weak in Geometry. It provides an excellent opportunity for writing across the curriculum.		Summary / Justification / Eviden	ice:
Skills and Procedures:	<ul><li> Weak (1-2)</li><li> Moderate (2-3)</li><li> Strong (3-4)</li></ul>	Mathematical Relationships:	<ul><li> Weak (1-2)</li><li> Moderate (2-3)</li><li> Strong (3-4)</li></ul>
Summary / Justification / Evid	lence:	Summary / Justification / Eviden	ice:

1. Make sense of problems and persevere in solving them.			
Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyz			
givens, constraints, relationships, and goals. They make conjectures about th	he form and meaning of the solution and plan a solution pathway rather than		
simply jumping into a solution attempt. They consider analogous problems, a	, and try special cases and simpler forms of the original problem in order to		
gain insight into its solution. They monitor and evaluate their progress and c	change course if necessary. Older students might, depending on the context		
the problem, transform algebraic expressions or change the viewing window	w on their graphing calculator to get the information they need.		
Mathematically proficient students can explain correspondences between eq	equations, verbal descriptions, tables, and graphs or draw diagrams of		
important features and relationships, graph data, and search for regularity of	or trends. Younger students might rely on using concrete objects or pictures		
help conceptualize and solve a problem. Mathematically proficient students of	check their answers to problems using a different method, and they		
continually ask themselves, "Does this make sense?" They can understand th	he approaches of others to solving complex problems and identify		
correspondences between different approaches.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are mi			
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
,			
	<b>Overall Rating</b> :		
	Overall Rating:		

2. Reason abstractly and quantitatively.			
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to			
bear on problems involving quantitative relationships: the ability to <i>decontextualize</i> —to abstract a given situation and represent it symbolically and			
manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize,			
to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of			
creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to			
compute them; and knowing and flexibly using different properties of operations and objects.			
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:	Overall Rating:		

3. Construct viable arguments and critique the reasoning of other	rs.		
Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments.			
They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by			
breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the			
arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose.			
Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from the			
which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such			
objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until late			
grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, dec			
whether they make sense, and ask useful questions to clarify or improve the arguments.			
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are mis			
or not well developed in the instructional materials (if			
Summary / Justification / Evidence:			
	<b>Overall Rating</b> : $\Box 1 \Box 2 \Box 3 \Box 4$		

4. Model with mathematics.		
Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early		
grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning		
plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function t		
describe how one quantity of interest depends on another. Mathematically p		
assumptions and approximations to simplify a complicated situation, realizing		, , , , , , , , , , , , , , , , , , ,
quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can		
analyze those relationships mathematically to draw conclusions. They routing		cal results in the context of the situation and
reflect on whether the results make sense, possibly improving the model if it has not served its purpose.		
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are miss		
or not well developed in the instructional materials		the instructional materials (if any):
Summary / Justification / Evidence:		
	Overall Rating:	$\Box 1  \Box 2  \Box 3  \Box 4$
	1	

5. Use appropriate tools strategically.		
Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper,		
concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software.		
Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools		
might be helpful, recognizing both the insight to be gained and their limitatio		
graphs of functions and solutions generated using a graphing calculator. The		
mathematical knowledge. When making mathematical models, they know that		
assumptions, explore consequences, and compare predictions with data. Mat		
relevant external mathematical resources, such as digital content located on		
technological tools to explore and deepen their understanding of concepts.	, and the second	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing	
or not well developed in the instructional materials (if		
	of not wen developed in the instructional materials (if any).	
Summary / Justification / Evidence:		
	<b>  Overall Rating</b> :	

6. Attend to precision.			
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own			
reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about			
specifying units of measure, and labeling axes to clarify the correspondence	with quantities in a problem. They calculate accurately and efficiently,		
express numerical answers with a degree of precision appropriate for the pre			
explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.			
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing		
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
building / justification / Evidence.	<b>Overall Rating</b> :		
	Overall maning.		

7. Look for and make use of structure.			
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more			
the same amount as seven and three more, or they may sort a collection of sh	the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see		
$^{\circ}$ — 8 equals the well-remembered 7 $^{\circ}$ — 5 + 7 $^{\circ}$ — 3, in preparation for learni	$^{\circ}$ — 8 equals the well-remembered 7 $^{\circ}$ — 5 + 7 $^{\circ}$ — 3, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$ , older		
students can see the 14 as $2^{\circ}$ — 7 and the 9 as $2 + 7$ . They recognize the sign	ficance of an existing line in a g	geometric figure and can use the strategy of	
drawing an auxiliary line for solving problems. They also can step back for a	n overview and shift perspectiv	ve. They can see complicated things, such as	
some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)2$ as 5 minus a positive			
number times a square and use that to realize that its value cannot be more t	han 5 for any real numbers $x$ a	nd <i>y</i> .	
Indicate the chapter(s), section(s), and/or page(s) reviewed: Portions of the domain, cluster, and standard that are miss			
	or not well developed in	the instructional materials (if any):	
	•		
Summary / Justification / Evidence:			
building / Justification / Evidence.	Overall Rating:	$\Box_1$ $\Box_2$ $\Box_3$ $\Box_4$	
	Over an Nating.		

8. Look for and express regularity in repeated reasoning.			
Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students			
might notice when dividing 25 by 11 that they are repeating the same calcula			
paying attention to the calculation of slope as they repeatedly check whether			
might abstract the equation $(y-2)/(x-1) = 3$ . Noticing the regularity in the v			
1)( $x3 + x2 + x + 1$ ) might lead them to the general formula for the sum of a ge			
students maintain oversight of the process, while attending to the details. The	ey continually evaluate the reasonableness of their intermediate results.		
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Portions of the domain, cluster, and standard that are missing		
	or not well developed in the instructional materials (if any):		
Summary / Justification / Evidence:			
	Overall Rating: $\Box 1 \Box 2 \Box 3 \Box 4$		

Domain:	Summary and documentation of how the domain, cluster, and	
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.	
7.RP.1  Compute units rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different unites. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction (1/2)/(1/4) miles per hour, equivalently 2 miles per hour.	Important Mathematical Ideas:	
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):  Summary / Justification / Evidence:		
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:	

Domain:	Summary and documentation of how the domain, cluster, and	
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.	
Standard: 7.RP.2a	Important Mathematical Ideas:  Skills and Procedures:  Mathematical Relationships:	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:	
or not well developed in the instructional materials (if any):		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	1 2 3 \( \) 4

Domain:	Summary and documentation of how the domain, cluster, and	
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.	
Standard:		
	Important Mathematical Ideas: 1 2 3 4	
7.RP.2b		
	Skills and Procedures:	
	Mathematical Relationships:  1 2 3 4	
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:	
or not well developed in the instructional materials (if any):	Not much with equations	
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	<b>Overall Rating</b> :	

Domain:	Summary and documentation of how the domain, cluster, and
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.
Standard: 7.RP.2c	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: □1 □2 □3 ⊠4

Domain:	Summary and documentation of how the domain, cluster, and
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.
7.RP.2d	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: □1 □2 □3 ⊠4

Domain:	Summary and documentation of how the domain, cluster, and
Ratios and Proportional Relationships	standard are met. Cite examples from the materials.
Standard: 7.RP.3	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard: 7.NS.1a	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard: 7.NS.1b	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard: 7.NS.1c	Important Mathematical Ideas:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
7.NS.1d	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas:
7.NS.2a	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Distributive property was missing
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \boxtimes 3  \Box 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard: 7.NS.2b	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
7.NS.2c	
	Skills and Procedures:
	Mathematical Relationships: 1 2 3 4
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Doesn't develop the properties well enough
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\square 1  \square 2  \boxtimes 3  \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
7.NS.2d	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
The Number System	standard are met. Cite examples from the materials.
Standard: 7.NS.3	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples from the materials.
Standard: 7.EE.1	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence: Not a lot of real-world connection; factoring and expanding were not well-developed or missing
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	Overall Rating:134

Domain:	Summary and documentation of how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples from the materials.
Standard: 7.EE.2	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples from the materials.
7.EE.3	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating: □1 □2 □3 ⊠4

Domain:	Summary and documentation of	how the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard: 7.EE.4a	Important Mathematical Ideas: Skills and Procedures:	□1     □2     □3     □4       □1     □2     □3     □4
	Mathematical Relationships:	<u> </u>
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Eviden	ice:
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	<u> </u>

Domain:	Summary and documentation of h	low the domain, cluster, and
Expressions and Equations	standard are met. Cite examples	from the materials.
Standard:		
	Important Mathematical Ideas:	$\square 1  \square 2  \square 3  \square 4$
7.EE.4b		
	Skills and Procedures:	$\square 1  \square 2  \square 3  \square 4$
	Mathematical Relationships:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence	ce:
or not well developed in the instructional materials (if any):	Not a lot of real-world applications	
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	$\square 1  \square 2  \boxtimes 3  \square 4$

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:		
7.G.1	Important Mathematical Ideas:	
7.G.1	Skills and Procedures:	<u>1</u> <u>2</u> <u>3</u> <u>4</u>
	Mathematical Relationships:	☐1 ☐2 ☐3 ☐4
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Eviden	ice:
or not well developed in the instructional materials (if any):		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	$\square 1$ $\square 2$ $\square 3$ $\boxtimes 4$

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:	Important Mathematical Ideas	
7.G.2	Important Mathematical Ideas:	
7.G.2	Skills and Procedures:	<u>1</u> <u>2</u> <u>3</u> <u>4</u>
	Mathematical Relationships:	<u></u>
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Eviden	ice:
or not well developed in the instructional materials (if any):		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	$\square 1$ $\square 2$ $\square 3$ $\boxtimes 4$

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:	Important Mathematical Ideas	
7.G.3	Important Mathematical Ideas:	
7.G.3	Skills and Procedures:	□1 □2 □3 □4
	Mathematical Relationships:	<u></u>
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evider	ice:
or not well developed in the instructional materials (if any):		
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	☐1 ☐2 ☐3 ☐4

Domain:	Summary and documentation of	how the domain, cluster, and
Geometry	standard are met. Cite examples	from the materials.
Standard:		
	Important Mathematical Ideas:	$\square 1  \square 2  \square 3  \square 4$
7.G.4		
	Skills and Procedures:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
	Mathematical Relationships:	$\square 1$ $\square 2$ $\square 3$ $\square 4$
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Eviden	nce:
or not well developed in the instructional materials (if any):	No relationship between circumfer	ence and area
	_	
Indicate the chapter(s), section(s), and/or page(s) reviewed:		
	Overall Rating:	<u> </u>

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
7.G.5	
	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Very little practice or real-world application
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\square 1  \square 2  \square 3  \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Geometry	standard are met. Cite examples from the materials.
Standard: 7.G.6	Important Mathematical Ideas:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence: No two-dimensional
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard: 7.SP.1	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Mathematical Relationships:1234  Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas: 1 2 3 4
7.SP.2	
	Skills and Procedures:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not well-developed
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \boxtimes 3  \Box 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.3	Important Mathematical Ideas:
	Mathematical Relationships:1234
Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):	Summary / Justification / Evidence:
Indicate the chapter(s), section(s), and/or page(s) reviewed:	Overall Rating:

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.4	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.5	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.6	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.7a	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Summary / Justinication / Evidence.
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard: 7.SP.7b	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
7.SP.8a	Important Mathematical Ideas:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \boxtimes 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard:	
	Important Mathematical Ideas:  1 2 3 4
7.SP.8b	
	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Tree diagrams were the only methods we found
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\square 1  \square 2  \square 3  \square 4$

Domain:	Summary and documentation of how the domain, cluster, and
Statistics and Probability	standard are met. Cite examples from the materials.
Standard:	Important Mathematical Ideas. 1 2 2
7.SP.8c	Important Mathematical Ideas:1234
7.Sr.oc	Skills and Procedures:
	Mathematical Relationships:
Portions of the domain, cluster, and standard that are missing	Summary / Justification / Evidence:
or not well developed in the instructional materials (if any):	Not well-developed
Indicate the chapter(s), section(s), and/or page(s) reviewed:	
	<b>Overall Rating</b> : $\Box 1  \Box 2  \Box 3  \Box 4$



Instructional Materials
Analysis and Selection

**Phase 3:** Assessing Content Alignment to the Common Core State Standards for Mathematics

Dvald Rating: a

Grade 7



# Instructional Materials Analysis and Selection

Phase 3:

Assessing Content Alignment to the Common Core State Standards for Mathematics

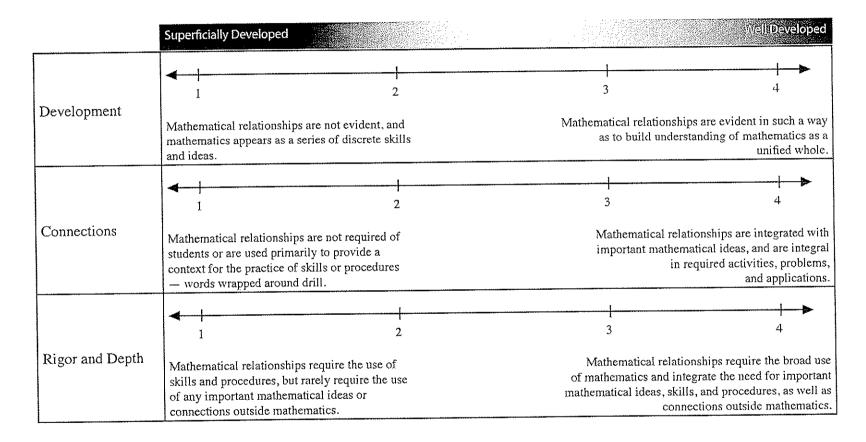
A project of

The Indiana Education Roundtable, The Indiana Department of Education, and

The Charles A. Dana Center at The University of Texas at Austin

2010-2011

### Mathematical Relationships: Understanding the scoring



Reviewed By:	
Title of Instructional Materials:	

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence



Reviewed By:	
Title of Instructional Materials:	

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

p. 158-159, 70-71, 142-1

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

not necessarily

partner but



Reviewed By:	
Title of Instructional Materials:	

4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

142, 158, 213, 218, 262, 362-363

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Reviewed By:	
•	
Title of Instructional Materials:	

6. Attend to	precision.
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Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Summary/Justification/Evidence

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see  $7 \times 8$  equals the well remembered  $7 \times 5 + 7 \times 3$ , in preparation for learning about the distributive property. In the expression  $x^2 + 9x + 14$ , older students can see the 14 as  $2 \times 7$  and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see  $5 - 3(x - y)^2$  as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

P1107, 152-159

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Found



Reviewed By:	
Title of Instructional Materials:	

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1)=3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1),  $(x-1)(x^2+x+1)$ , and  $(x-1)(x^3+x^2+x+1)$  might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

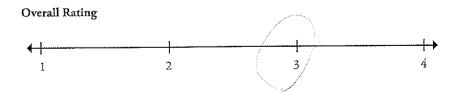
Indicate the chapter(s), section(s), or page(s) reviewed.

A 9 167 53

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

FOUR



Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Analyze proportional relationships and use them to solve real-world and mathematical problems. met. Cite examples from the materials. 7.RP.1 Important Mathematical Ideas Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/14 miles per hour, equivalently 2 miles per hour. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Basic unit rates found in 3-Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Analyze proportional relationships and use them to solve real-world and met. Cite examples from the materials. mathematical problems. 7.RP.2a Important Mathematical Ideas 2. Recognize and represent proportional relationships between quantities. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the Skills and Procedures origin. 3 Mathematical Relationships 3 Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 3-3, 3-4, 3 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating 4 2

Reviewed By:			
Title of Instructional Materials:			

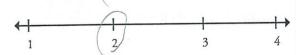
mathematical problems.

Analyze proportional relationships and use them to solve real-world and Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

#### 7.RP.2b

- 2. Recognize and represent proportional relationships between quantities.
  - b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

Skills and Procedures



Mathematical Relationships

Important Mathematical Ideas

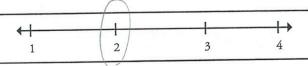


Summary / Justification / Evidence

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3-1,3-2,3-5,3-7,

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the	e materials.	domain, ciu	ster, and stands	alu ale
7.RP.2c  2. Recognize and represent proportional relationships between quantities.	Important Mathematical Ideas	<del>∢  </del> 1	2		<del></del>
c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as t = pn.	Skills and Procedures	<b>∢ !</b> 1	2	3	<del> →</del>
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cle developed in the instruction	uster, and stan	idard that a (if any):	re missing or no	ot well
	Overall Rating	<del></del>	2	3	<del>-   →</del> 4

Reviewed By:

Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - RATIOS AND PROPORTIONAL RELATIONSHIPS - 7.RP

Analyze proportional relationships and use them to solve real-world and Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. mathematical problems. 7.RP.2d Important Mathematical Ideas 2. Recognize and represent proportional relationships between quantities. d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 3-5,3-7,3-76 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Reviewed By:

Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - RATIOS AND PROPORTIONAL RELATIONSHIPS - 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

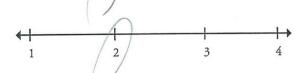
### 7.RP.3

Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and marketowns, gratuities and commissions, fees, percent increase and decrease, percent error. Important Mathematical Ideas

Skills and Procedures

1 2 3 4

Mathematical Relationships



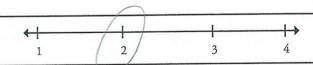
Summary / Justification / Evidence

Rest found

Indicate the chapter(s), section(s), and/or page(s) reviewed.

3-6, 4-1, 4-2, 4-3, 4-4

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):



Reviewed By:		 
Title of Instructional Materials:		

Apply and extend previous understandings of operations with fractions Summary and documentation of how the domain, cluster, and standard are to add, subtract, multiply, and divide rational numbers. met. Cite examples from the materials. 7.NS.1a Important Mathematical Ideas 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. a. Describe situations in which opposite quantities combine to make Skills and Procedures 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. 2 Mathematical Relationships 2 Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating 1

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.1b Important Mathematical Ideas 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. b. Understand p + q as the number located a distance |q| from p, in the Skills and Procedures positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 1-2, 2-2 developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.1c Important Mathematical Ideas 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. c. Understand subtraction of rational numbers as adding the additive inverse, p-q=p+(-q). Show that the distance between two Skills and Procedures rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 1-3, 2-3 developed in the instructional materials (if any): Overall Rating

Reviewed By:

Title of Instructional Materials:

## MATHEMATICS: GRADE 7 - THE NUMBER SYSTEM - 7.NS

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.1d Important Mathematical Ideas 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. d. Apply properties of operations as strategies to add and subtract Skills and Procedures rational numbers. AND MESS Mathematical Relationships Summary / Justification / Evidence 128 (10/20 - 30) Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 1-2, 1-3, 2-2, 2-36 developed in the instructional materials (if any): Overall Rating

Reviewed By:

Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - THE NUMBER SYSTEM - 7.NS

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.2a Important Mathematical Ideas 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the Skills and Procedures properties of operations, particularly the distributive property, leading to products such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing realworld contexts. Mathematical Relationships 3 Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 1-4, 2-3 developed in the instructional materials (if any): Overall Rating

Reviewed By:			 	
Title of Instructional Materials	5:			

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.2b Important Mathematical Ideas 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) Skills and Procedures is a rational number. If p and q are integers, then -(p/q) = (-p)/q = p/(-q). Interpret quotients of rational numbers by describing real-world contexts. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 1-5, 2-1, 2-3 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:				_
Title of Instructional Ma	terials:			

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.2c Important Mathematical Ideas 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. c. Apply properties of operations as strategies to multiply and divide rational numbers. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 1-4, 1-5, 2-3, 2-3b Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, clu	ster, and standar	o are
<ul><li>7.NS.2d</li><li>2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</li></ul>	Important Mathematical Ideas	1	2	1 3	4
d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.  Indicate the chapter(s), section(s), and/or page(s) reviewed.	Skills and Procedures	1	2	1 3	<del>  </del>
	Mathematical Relationships	1	2	3	4
	Summary / Justification / Evidence  Portions of the domain, cluster, and standard that are missing or not weldeveloped in the instructional materials (if any):				
	Overall Rating	1	2	1,3	4

Reviewed By:

Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - THE NUMBER SYSTEM - 7.NS

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. Important Mathematical Ideas 7.NS.3 Solve real-world and mathematical problems involving the four operations with rational numbers.1 Skills and Procedures Mathematical Relationships Summary / Justification / Evidence 1 Computations with rational numbers extend the rules for manipulating fractions to complex Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 1-2,1-3,1-4,1-5,2-2,2 developed in the instructional materials (if any): Overall Rating

Reviewed By:

Title of Instructional Materials:

## MATHEMATICS: GRADE 7 - EXPRESSIONS AND EQUATIONS - 7.EE

Use properties of operations to generate equivalent expressions.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.EE.1  Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	Important Mathematical Ideas  1 2 3 4
	Skills and Procedures  1 2 3 4
	Mathematical Relationships  1 2 3 4
	Summary / Justification / Evidence Dist Prop. not explained we
Indicate the chapter(s), section(s), and/or page(s) reviewed.	2-56
2-5b	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating
	1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Jse properties of operations to generate equivalent expressions.	Summary and documentation met. Cite examples from the	n of how th materials.	ne domain, clusti	er, and stand	
7.EE.2	Important Mathematical Ideas	<del>( </del>	2	3	<del>    4</del>
Understand that rewriting an expression in different forms of the problem and how the quantities in it are related. Context can shed light on the problem and how the quantities in it are related. For example, a + 0.05a = 1.05a means that "increase by 5%" is the same as "multiply by 1.05."	Skills and Procedures	1		3	<del> →</del> 4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	Evidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.	6213/				
4-3	Portions of the domain, cl developed in the instruction	uster, and s onal materi	standard that are als (if any):	missing or n	ot well
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

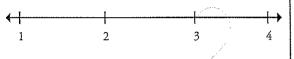
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

#### 7.EE.3

Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

Important Mathematical Ideas



Skills and Procedures



Mathematical Relationships



Summary / Justification / Evidence

Indicate the chapter(s), section(s), and/or page(s) reviewed.



Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating

1 2 3 4

Reviewed By:	
Title of Instructional Materia	ls:

Summary and documentation of how the domain, cluster, and standard are Solve real-life and mathematical problems using numerical and met. Cite examples from the materials. algebraic expressions and equations. Important Mathematical Ideas 7.EE.4a 4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. a. Solve word problems leading to equations of the form px + q = r and Skills and Procedures p(x + q) = r, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width? Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 2-4,2-5,2-6 developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Solve real-life and mathematical problems using numerical and algebraic expressions and equations. met. Cite examples from the materials. 7.EE.4b Important Mathematical Ideas 4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. b. Solve word problems leading to inequalities of the form px + q > rSkills and Procedures or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and Mathematical Relationships describe the solutions. Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating 4

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.	Summary and documentation of how the domain, cluster, and stand met. Cite examples from the materials.					
7.G.1	Important Mathematical Ideas	4 1	1	<b>I</b>		
Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Important Watternanca Todas	1	2	3	4	
	Skills and Procedures	4			<del></del>	
		1	2	3	4	
	Mathematical Relationships	<del>                                      </del>			<del></del>	
		1	2	3	4	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence				
5-4, 5-46	Portions of the domain, cludeveloped in the instruction	ster, and s nal materia	tandard that a	are missing or no	t well	
		and the second of the second o				
	Overall Rating	4	- <b> </b> 2	3	<del></del>	

Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Summary and documentation of how the domain, cluster, and standard are Draw, construct, and describe geometrical figures and describe the met. Cite examples from the materials. relationships between them. 7.G.2 Important Mathematical Ideas Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. 0.195, 198, 199, 206, 42 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Overall Rating

Reviewed By:	
Title of Instructional Materials:	

### MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.	see the Summary and documentation of how the domain, cluster, and st met. Cite examples from the materials.				
7.G.3  Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Important Mathematical Ideas	1	1 2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	Evidence			
	Portions of the domain, cludeveloped in the instruction	uster, and onal mater	standard that are ials (if any):	missing or n	ot well
	"main shake a make a	and the second s			
	Overall Rating	<del>(   </del>	1 2	3	4

Reviewed By:					
Title of Instructional Materials:					

MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

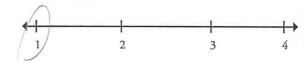
#### 7.G.4

Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

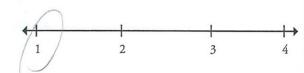
Important Mathematical Ideas



Skills and Procedures



Mathematical Relationships



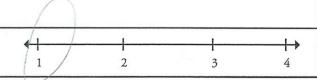
Indicate the chapter(s), section(s), and/or page(s) reviewed.

Summary / Justification / Evidence



Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating



Reviewed By: Title of Instructional Materials:

### MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Solve real-life and mathematical problems involving angle measure, met. Cite examples from the materials. area, surface area, and volume. 7.G.5 Important Mathematical Ideas

Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

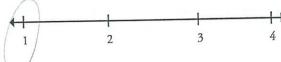
Indicate the chapter(s), section(s), and/or page(s) reviewed.

p. 422-423 (Topic 1)

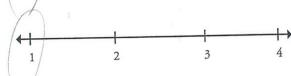
Summary and documentation of how the domain, cluster, and standard are



Skills and Procedures



Mathematical Relationships

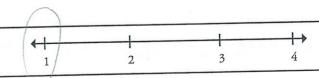


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Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating



Summary and documentation of how the domain, cluster, and standard are

Title of Instructional Materials:

MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Solve real-life and mathematical problems involving angle measure, met. Cite examples from the materials. area, surface area, and volume. 7.G.6 Important Mathematical Ideas Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Skills and Procedures Mathematical Relationships Summary / Justification / Evidence

Indicate the chapter(s), section(s), and/or page(s) reviewed.

6-2, 6-4, 6-6, 7-

Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Use random sampling to draw inferences about a population.	Summary and documentation met. Cite examples from the	on of how the domain, cluster, and standard are e materials.
7.SP.1  Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about	Important Mathematical Ideas	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$
a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Skills and Procedures	1 2 3 4
	Mathematical Relationships	1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	uster, and standard that are missing or not well
8-4,8-46	developed in the instruction	onal materials (if any):
	Overall Rating	1 2 3 4

Title of Instructional Materials:

## MATHEMATICS: GRADE 7 - STATISTICS AND PROBABILITY - 7.SP

Summary and documentation of how the domain, cluster, and standard are Use random sampling to draw inferences about a population. met. Cite examples from the materials. 7.SP.2 Important Mathematical Ideas Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school Skills and Procedures election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well 8-4,8-46 developed in the instructional materials (if any): Overall Rating 1

Reviewed By:	
Title of Instructional Materials:	

Draw informal comparative inferences about two populations.	Summary and documentation met. Cite examples from the	on of how the domain, cluster, and standard e materials.	аге
7.SP.3 Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between	Important Mathematical Ideas	1 2 3	4
the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.	Skills and Procedures	$\begin{pmatrix} 1 \\ 1 \end{pmatrix}$ $\begin{pmatrix} 1 \\ 2 \end{pmatrix}$ $\begin{pmatrix} 3 \\ 3 \end{pmatrix}$	4
	Mathematical Relationships	$\begin{array}{c c} & & & \\ \hline & & \\ 1 & & \\ 2 & & 3 \\ \end{array}$	4
	Summary / Justification / E	Evidence	
Indicate the chapter(s), section(s), and/or page(s) reviewed.		to to and that are missing or not	
8-462	Portions of the domain, cl developed in the instruction	uster, and standard that are missing or not onal materials (if any):	
	Overall Rating	1 2 3	4

Reviewed By:	
Title of Instructional Materials:	

Draw informal comparative inferences about two populations.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.
7.SP.4  Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two	Important Mathematical Ideas  1 2 3 4
populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.	Skills and Procedures  1 2 3 4
	Mathematical Relationships  1 2 3 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence
8-46	Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):
	Overall Rating  1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the	on of how the materials.	ne domain, c	iuster, and standa	aru are
7.SP.5  Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers	Important Mathematical Ideas	1	2	1 3	4
indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.	Skills and Procedures	1	2	3	<del>  </del>
	Mathematical Relationships	1	<del>   </del> 2	- \frac{1}{3}	<del>    </del>
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, cludeveloped in the instruction	uster, and s	tandard that lls (if any):	are missing or no	 ot well
	Overall Rating	<b>←</b>   1	2	1 3	4

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the		domain, cl	uster, and standa	ırd are
7.SP.6	Important Mathematical Ideas	4-1	<u> </u>		
Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the		1	2	3	4
probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.	Skills and Procedures	<del>(- </del>			<del></del>
		1	2	$\left(\begin{array}{c}3\\\end{array}\right)$	4
	Mathematical Relationships	<del>&lt;  </del>	<del></del>	$ \widehat{\Lambda}$	<del></del>
		1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
9-3	Portions of the domain, clu developed in the instructio			re missing or not	t well
		***************************************	S		
	Overall Rating	<b>←</b>   1	- I 2	1 3	4

Reviewed By:	
Title of Instructional Materials:	

nvestigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the r	of how the domain, cluster, and standard are materials.
<ol> <li>Develop a probability model and use it to find probabilities of events.</li> <li>Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</li> </ol>	Important Mathematical Ideas	1 2 3 4
a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.	Skills and Procedures	1 2 3 4
	Mathematical Relationships  Summary / Justification / Evi	idence
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Portions of the domain, clus developed in the instruction	ster, and standard that are missing or not well hal materials (if any):
	Overall Rating	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the	on of how the materials.	domain, clus	ster, and standa	Tu ale
7.SP.7b	Important Mathematical Ideas	<del></del>			<del> -&gt;</del>
7. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.	•	1	2	3	4
b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence			
9-2	Portions of the domain, cludeveloped in the instruction	uster, and sta onal materials	ndard that ar (if any):	e missing or no	t well
	Overall Rating	-	<del>                                     </del>	1	<del>     </del>

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Title of Instructional Materials:	

nvestigate chance processes and develop, use, and evaluate probability models.	Summary and documentatio met. Cite examples from the	materials.	e domain, clus	ter, and Standard	
<ul><li>7.SP.8a</li><li>8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</li></ul>	Important Mathematical Ideas	<del>← </del> 1	2	3	<del>- →</del> 4
<ul> <li>a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</li> </ul>	Skills and Procedures	1	2	3	<del>-    </del>
	. Mathematical Relationships	1	2	3	<del>-  -</del> 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	ividence			
9-4	Portions of the domain, cludeveloped in the instruction	uster, and stonal materia	tandard that ar Is (if any):	e missing or not	well
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Reviewed By:

Title of Instructional Materials:

nvestigate chance processes and develop, use, and evaluate probability models.	Summary and documentation of how the domain, cluster, and standar met. Cite examples from the materials.	d are
SP.8b  3. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.	Important Mathematical Ideas 1 2 3	4
b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.	Skills and Procedures  1 2 3	4
	Mathematical Relationships  1 2 3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Evidence Tree Diagrams found	***************************************
9-4	Portions of the domain, cluster, and standard that are missing or not videveloped in the instructional materials (if any):	vell
	Overall Rating  1 2 3	<u></u> +→ 4

Reviewed By:

Title of Instructional Materials:

vestigate chance processes and develop, use, and evaluate obability models.	Summary and documentation met. Cite examples from the	e materials.	domain, oldo		
SP.8c  Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.	Important Mathematical Ideas	1	2	3	4
c. Design and use a simulation to generate frequencies for compound events. For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / I	Evidence			
ndicate the chapter(s), section(s), and/or page(s) reviewed.				winging or r	of well
p. 404-405	Portions of the domain, c developed in the instructi	luster, and stational materials	indard that are	e missing or i	IOL WEIL
	Not	For	nd		
	Overall Rating	(+1)	2	3	4



	Mathematical Practices					Summary/	Missing pieces of	Overall
	Make sense of problems and persevere in solving them.	Chapter/Section/Page		!		Justification/Evidence	Math Practice	Rating
***********	2. Reason abstractly and quantitatively.							
***********	3. Construct viable arguments and critique the reasoning of others.			*****************				
	4. Model with mathematics.							
	5. Use appropriate tools strategically.							
	6. Attend to precision.							
	7. Look for and make use of structure.							
*************	8. Look for and express regularity in repeated reasoning.			***************************************				
7.RP	Ratios and Proportional Relationships	Chapter/Section/Page	Important Math	Skills and Procedures	Math Relationships	Summary/ Justification/Evidence	Missing portions of Standards	Overall Rating
	Analyze proportional relationships and use them to solve real-world and mathematical problems.	Chapter/section/rage	lucas	riocedures	inelationships	pastification/ Evidence	Standards	inatilig
.RP.1	Compute unit rates associated with ratios of fractions, including rations of lengths, areas and other quantities measured in like or different units. For example, If a person walks $1/2$ mile in each $1/4$ , complete the unit rate as the complex fraction $\frac{1}{2}/\frac{1}{4}$ miles per hour, equivalently 2 miles per hour.	98-103,127		3 -		minime at best		
RP.2a	Recognize and represent proportional relationships between quantities. a.  Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the organ.	110-115,116,-121	-			pilo value ??		
RP.2b	Recognize and represent proportional relationships between quantities. B. Identify the constant or proportionality ( <i>unit rate</i> ) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships	98-103 164-109 122-107, 136-141 1414-1418 153	4	2	->	want mal		
RP.2c	Recognize and represent proportional relationships between quantities. C. Represent proportional relationships by equations. For example, if total cost $t$ is proportional to the number $n$ of items purchased at a constant price $p$ , the relationship between the total cost and the number of items can be expressed as $t = pn$ .	136-HI 169 369	d	irect vo	avia tom?	doesn't stade prepare problem for problem pry		
RP.2d	Recognize and represent proportional relationships between quantities. D. Explain what a point $(x, y)$ on a graph of a proportional relationship means in terms of the situation, with special attention to the points $(0,0)$ and $(1, r)$ where $r$ is the unit rate.	122-127 136-141 NIA 1418	- Nedotop	+ out (	0,0) +(1,6)	· Veny		
RP.3	Use proportional relationships to solve multistep and percent problems. Examples: simple interest, tax, markdowns, quantities and commissions, fees, percent increases and decrease, percent error.	130-135, NB 158-163, 164-169 172-177 178-183	4	- +		fraction bass		



	THE NUMBER SYSTEM - 7.NS					
7.NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.					
7.NS.1.a	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.  A. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.	673		3 —	minimal up	
7.NS.1b	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. B. Understand $p + q$ as the number located a distance $ q $ from $p$ , in the positive or negative direction depending on wither $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rotational numbers by describing real-world contexts.	8-13, 19,45, 56-61, 43		3 ->	Examples not interesty	
7.NS.1c	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. C. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	10, 14-19, 471 56-61, 67	4		need better	
7.NS.1d	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.  D, /aookt orioertues if ioeratuibs as strategues ti add abd sybtract rational numbers.	8-13, N=19; 56-61,67A-67B	0 4	2	covers to proched but I the proched word	
7.NS.2a	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. A. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to produces such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	22-27, 62-67	~	2,	e real world	??





7.NS.2b	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. B. Understand that integers can be divided. Provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers, then $-(p/q) = (-p)lq = pl(-q)$ . Interpret quotients of rational numbers by describing real-world contexts.		year we	of grade			
7.NS.2c	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.  C. Apply properties of operations as strategies to multiply and divide rational numbers.	28-33 63-67	ny	d move	teal excurp	٥	
7.NS.2d	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.  D. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	50-55			realworks		
7.NS.3	Solve real-world and mathematical problems involving the four operations with rational numbers. (Computations with rational numbers extend the rules for manipulating fractions to complex fractions).	8-13 14-19, 22-27, 28-33 56-61, 62-67	Sh	il md	wave relevant	examples for stand	n tr
7.EE	EXPRESSIONS AND EQUATIONS - 7.EE						
	Use properties of operations to generate equivalent expressions.	181A-81B			*	· much · i	
7.EE.1	Apply properties of operations as strategies to add and subtract, factor, and expand linear expressions with rational coefficients.			> MIS	y wor	epractice	
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."	172-177,618					
	Solve real-life and mathematical problems using numerical and algebraic						
7.EE.3	expressions and equations.  Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a tower bar 9% inches long in the center of a door that is 27 ½ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.	158-163,164-169					





7.EE.4a	Use variables to represent quantities in a real-world or mathematical problem and construction simple equations and inequalities to solve problems by reasoning about the quantities. A. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. its length is 6 cm. What is its width?	70-75, 76-81 82-87, 94, 209, 418
7.EE.4b	Use variables to represent quantities in a real-world or mathematical problem and construction simple equations and inequalities to solve problems by reasoning about the quantities. B. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write in inequality for the number of sales you need to make, and describe the solutions.	209. 418 87A-87D WOULD Yellowet Peally
	GEOMETRY - 7.G	
	Draw, construct, ad describe geometrical figures and describe the relationships between them.	
7.G.1	Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	
7.G.2	Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	
7.G.3	Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.  Solve real-life and mathematical problems involving angle measure, area, surface	
7.G.4	area, and volume.  Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the	
7.G.5	circumference and area of a circle.  Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and simple equations for an unknown angle in a figure.	
7.G.6	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	
7.SP	STATISTICS AND PROBABILITY - 7.SP	
	Use random sampling to draw inferences about population.	

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Reviewed By:



Title of Instructional Materials:

Big Ideas

Documenting Alignment to the Standards for Mathematical Practice

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

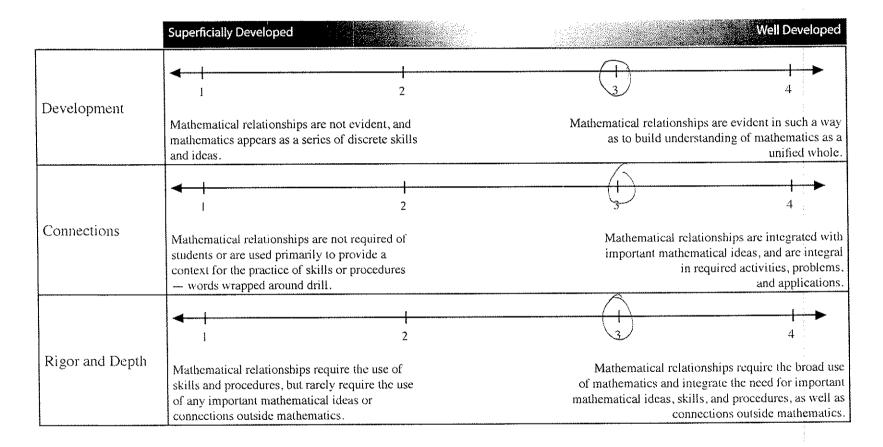
I had reviewed many books prior to this text so I was not detailed. I was over impressed in general with this text

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



### Mathematical Relationships: Understanding the scoring



Title of Instructional Materials: Big Ideas

### Documenting Alignment to the Standards for Mathematical Practice

### 2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Title of Instructional Materials: Big Edeas

### Documenting Alignment to the Standards for Mathematical Practice

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Title of Instructional Materials: Big deas

### Documenting Alignment to the Standards for Mathematical Practice

#### 4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Title of Instructional Materials: 129

Big Solean \*?

# Documenting Alignment to the Standards for Mathematical Practice

### 5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Title of Instructional Materials: Dig Ideas

### Documenting Alignment to the Standards for Mathematical Practice

6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

This is one of the few textbooks that addresses negatives and inequalities

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
•	
Title of Instructional Materials:	

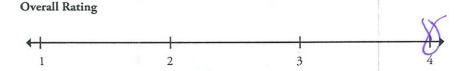
# Documenting Alignment to the Standards for Mathematical Practice

#### 7. Look for and make use of structure.

Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see  $7 \times 8$  equals the well remembered  $7 \times 5 + 7 \times 3$ , in preparation for learning about the distributive property. In the expression  $x^2 + 9x + 14$ , older students can see the 14 as  $2 \times 7$  and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see  $5 - 3(x - y)^2$  as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed	I Ву:	
Title of I	nstructional Materials:	

# Documenting Alignment to the Standards for Mathematical Practice

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1)=3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1),  $(x-1)(x^2+x+1)$ , and  $(x-1)(x^3+x^2+x+1)$  might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

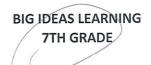
Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



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Title of Instructional Materials:	

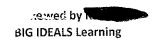
Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the			ter, and stand	dard are
7.RP.1  Compute unit rates associated with ratios of fractions, including ratios of	Important Mathematical Ideas	<del>(                                     </del>	2	3	<del></del>
lengths, areas and other quantities measured in like or different units. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour.		1	2	3	4
	Skills and Procedures	1	2	. 3	4
	Mathematical Relationships	1	2	3	<del></del>
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.				:	
	Portions of the domain, clu developed in the instructio			missing or n	ot well
	Overall Rating	1	2	3	4





3-4 3-20NC

	Mathematical Practices	Chapter/Section/Page				Summary/ Justification/Ev	Missing pieces of	Overall Rating
	1. Make sense of problems and persevere in solving them.	Described in Reviewer's	Guide and or	Web Site				4
	2. Reason abstractly and quantitatively.	Described in Reviewer's	Guide and or	n Web Site				4
	3. Construct viable arguments and critique the reasoning of others.	Described in Reviewer's	Guide and or	n Web Site				4
	4. Model with mathematics.	Described in Reviewer's	Guide and or	n Web Site				4
	5. Use appropriate tools strategically.	Described in Reviewer's	Guide and o	n Web Site				4
	6. Attend to precision.	Described in Reviewer's	Guide and o	n Web Site				4
	7. Look for and make use of structure.	Described in Reviewer's	Guide and o	n Web Site				4
	8. Look for and express regularity in repeated reasoning.	Described in Reviewer's	s Guide and o	n Web Site				4
.RP	Ratios and Proportional Relationships	Chapter/Section/Page	Important Math Ideas	Skills and Procedures	Math Relationships	Justification/Evidence	Missing portions of Standards	Overall Rating
7.RP1	Analyze proportional relationships and use them to solve real-world and mathematical problems.  Compute unit rates associated with ratios of fractions, including rations of lengths, areas and other quantities measured in like or different units. For example, If a person walks 1/2 mile in each 1/4, complete the unit rate as the complex fraction 1/2 / 1/4 miles per hour, equivalently 2 miles per hour.	3.1, page 98-103, 127, T-217B			2 EA	1.		4
7.RP.2	Recognize and represent proportional relationships between quantities.							4
7.RP.2a	Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the organ.	3.3, 110-115; 3.4, 116- 121; 3.7, 136-141; T147, T246	,					4
.RP.2b	Identify the constant or proportionality ( <i>unit rate</i> ) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships	3.1, 98-103, T104- T109, 3.5, 122-127; 3.7, 136-141, 3.7b T141A-T141B; T153						4
	Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$ .	3.7T136-T141, T169, T309						4
7.RP.2d	Explain what a point $(x, y)$ on a graph of a proportional relationship means in terms of the situation, with special attention to the points $(0,0)$ and $(1, r)$ where $r$ is the unit rate.	3.5, T122-T127; 3.7, T136-T141, 37.b, T141A-T141B						4



## BIG IDEAS LEARNING 7TH GRADE

7.RP.3	Examples: simple interest, tax, markdowns, quantities and commissions, fees, percent increases and decrease, percent error.	3.6, T130-%135; 4.1, T141B, T158-T163; 4.2, T164-T169; 4.3, T172- T177; 4.4, T178-T183, T-189
	THE NUMBER SYSTEM 4 7.NS	
7.NS	Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	
7.NS.1.a	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.  A. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.	Listed in Correla- tions Chart
7.NS.1b	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. B. Understand $p+q$ as the number located a distance $\lfloor q \rfloor$ from $p$ , in the positive or negative direction depending on wither $q$ is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rotational numbers by describing real-world contexts.	Listed in Correla- tions Chart
7.NS.1c	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. C. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	
7.NS.1d	Apply and extend previous understandings of addition and subtractions to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. D. Apply properties of operations as strategies to add and subtract rational numbers.	Listed in Correla- tions Chart
7.NS.2a	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. A. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to produces such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.	
ļ		tions Chart

## Instructional Materials Analysis and Selection

**Phase 3:** Assessing Content Alignment to the Common Core State Standards for Mathematics

Grade 7

Big Ideas
Reviewed by:
Carobillor Exec

a project of

The Charles A. Dana Center at the University of Texas at Austin

Overall Great book without of



Phase 3:

Assessing Content Alignment to the Common Core State Standards for Mathematics

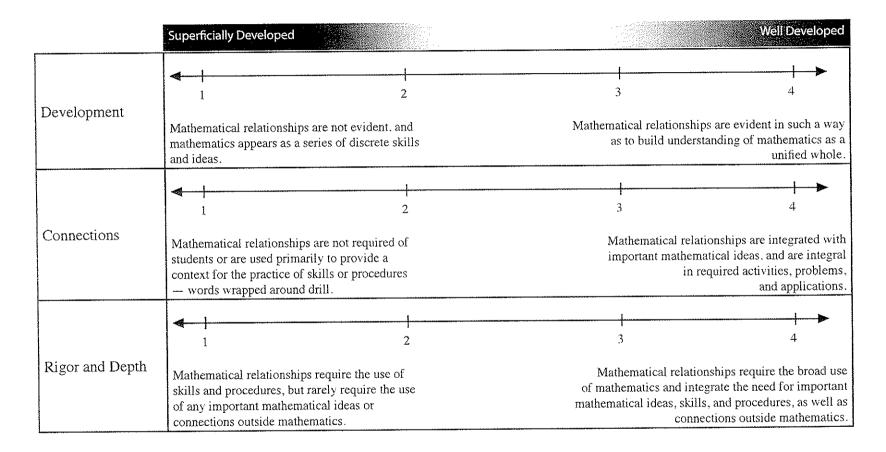
A project of

The Indiana Education Roundtable, The Indiana Department of Education, and

The Charles A. Dana Center at The University of Texas at Austin

2010-2011

## Mathematical Relationships: Understanding the scoring



	Reviewed By:	
Documenting Alignment to the Standards for Mathematical Practice	Title of Instructional Materials:	

1. Make sense of problems and persevere in solving them.

Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, "Does this make sense?" They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

2. Reason abstractly and quantitatively.

Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

Overall Rating

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

3. Construct viable arguments and critique the reasoning of others.

Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

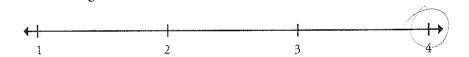
#### 4. Model with mathematics.

Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

Overall Rating

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

5. Use appropriate tools strategically.

Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



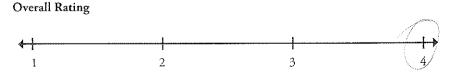
Reviewed By:	
Title of Instructional Materials:	

### 6. Attend to precision.

Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

7. Look for and make use of structure.

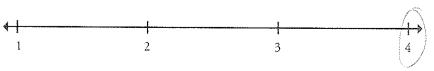
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see  $7 \times 8$  equals the well remembered  $7 \times 5 + 7 \times 3$ , in preparation for learning about the distributive property. In the expression  $x^2 + 9x + 14$ , older students can see the 14 as  $2 \times 7$  and the 9 as 2 + 7. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see  $5 - 3(x - y)^2$  as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers x and y.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):

Summary/Justification/Evidence

Overall Rating



Reviewed By:	
Title of Instructional Materials:	

8. Look for and express regularity in repeated reasoning.

Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through (1, 2) with slope 3, middle school students might abstract the equation (y-2)/(x-1)=3. Noticing the regularity in the way terms cancel when expanding (x-1)(x+1),  $(x-1)(x^2+x+1)$ , and  $(x-1)(x^3+x^2+x+1)$  might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.

Indicate the chapter(s), section(s), or page(s) reviewed.

Portions of the mathematical practice that are missing or not well developed in the instructional materials (if any):



Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the		domain, clus	ster, and star	ndard are
7.RP.1  Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction 1/2/1/4 miles per hour, equivalently 2 miles per hour.	Important Mathematical Ideas	1	<b>!</b> 2	3	4
1/4	Skills and Procedures	1	2	3	4
	Mathematical Relationships	<b>← </b>	2	3	4
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 3.	Portions of the domain, cludeveloped in the instruction	ster, and stan	dard that are if any):	missing or n	not well
	Overall Rating	<b>√  </b> 1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. mathematical problems. 7.RP.2a Important Mathematical Ideas 2. Recognize and represent proportional relationships between quantities. a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the Skills and Procedures origin. Mathematical Relationships Summary / Justification / Evidence Good real-life octivities Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Lessons 3,3,3,4,3,7 Overall Rating

Reviewed By:	

Title of Instructional Materials:

## MATHEMATICS: GRADE 7 - RATIOS AND PROPORTIONAL RELATIONSHIPS - 7.RP

Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the		ne domain, clu	ster, and stand	lard are
<ul> <li>7.RP.2b</li> <li>2. Recognize and represent proportional relationships between quantities.</li> <li>b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.</li> </ul>	Important Mathematical Ideas	<b>∢ ¦</b> 1	2	3	4
	Skills and Procedures	1	2	3	<del></del>
	Mathematical Relationships	<del>(                                     </del>	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Aessons 3.1, 3.2, 3.5, 3.7	Portions of the domain, cluded developed in the instruction	nal materials	s (if any):		t well
	Not much /	NOW R	anation!		
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials. mathematical problems. 7.RP.2c Important Mathematical Ideas 2. Recognize and represent proportional relationships between quantities. c. Represent proportional relationships by equations. For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the Skills and Procedures number of items can be expressed as t = pn. Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well desson 3.7 developed in the instructional materials (if any): Overall Rating

17

Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the			ster, and stand	lard are
<ul> <li>7.RP.2d</li> <li>2. Recognize and represent proportional relationships between quantities.</li> <li>d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points (0, 0) and (1, r) where r is the unit rate.</li> </ul>	Important Mathematical Ideas Skills and Procedures	1		3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Mathematical Relationships	1	2	3	<del></del>
	Summary / Justification / Evidence  Difficult for students to understand:  100 Expanded upon				
	Portions of the domain, clu developed in the instruction	ster, and s	tandard that are		t well
	Overall Rating	<b>←</b>   1	<u> </u>	3	<del></del>

Reviewed By:	
Title of Instructional Materials:	

Analyze proportional relationships and use them to solve real-world and mathematical problems.	Summary and documentation met. Cite examples from the		ne domain, clus	ster, and star	ndard are
7.RP.3	Important Mathematical Ideas	<i>a</i> 1	<b>.</b>	1	
Use proportional relationships to solve multistep ratio and percent problems.  Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.	important isatrosiation radao	1	2	3	4
	Skills and Procedures	<del>                                      </del>			<del></del>
		1	2	3	4
	Mathematical Relationships	<del></del>			
		1	2	3	4
	Summary / Justification / E	vidence Octions	in octivi	ties	
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, clu developed in the instruction			missing or	not well
Jessons 36, 41-4,4					
	Overall Rating			f	
		1	2	<del>-  </del> 3	4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation of how the domain, cluster, and standard a met. Cite examples from the materials.				andard are
<ul><li>7.NS.1a</li><li>1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</li></ul>	Important Mathematical Ideas	<del>4  </del> 1	2	3	
<ul> <li>a. Describe situations in which opposite quantities combine to make</li> <li>0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</li> </ul>	Skills and Procedures	<del>4  </del> 1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Mathematical Relationships	<del>(  </del>	2	3	4
	Summary / Justification / Ev	n pks	standard that are	<u> </u>	<u> </u>
	Overall Rating	1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Summary and documentation of how the domain, cluster, and standard are Apply and extend previous understandings of operations with fractions met. Cite examples from the materials. to add, subtract, multiply, and divide rational numbers. 7.NS.1b Important Mathematical Ideas 1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. b. Understand p + q as the number located a distance |q| from p, in the Skills and Procedures positive or negative direction depending on whether g is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. Mathematical Relationships Summary / Justification / Evidence Socialiable or p.9 Financiali examples are plentifu Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): Hessons 1.2 + 2.2 Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentati met. Cite examples from the		ne domain, clu	ster, and sta	ndard are
7.NS.1c					
<ol> <li>Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</li> </ol>	Important Mathematical Ideas	1	2	3	
c. Understand subtraction of rational numbers as adding the additive inverse, $p-q=p+(-q)$ . Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.	Skills and Procedures	I	2	3	$\longrightarrow$ $\stackrel{\longleftarrow}{4}$
	Mathematical Relationships	1	2	3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E				
	Portions of the domain, clu developed in the instruction			missing or	not well
	Overall Rating	1	2	3	1

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation met. Cite examples from the			ster, and stan	ndard are
<ol> <li>7.NS.1d</li> <li>Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.</li> </ol>	Important Mathematical Ideas	1	2	3	
d. Apply properties of operations as strategies to add and subtract rational numbers.	Skills and Procedures	1	2	<del></del>	4
	Mathematical Relationships	1	<u> </u>	3	<b>+</b>
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Jesons 1.2, 1.3, 2.2, 2.36	Portions of the domain, clu developed in the instruction			e missing or r	not well
	Overall Rating	<del></del> 1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation met. Cite examples from the			ster, and stan	dard are
<ul><li>7.NS.2a</li><li>2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</li></ul>	Important Mathematical Ideas	<del>(  </del>	2	3	
<ul> <li>a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as (-1)(-1) = 1 and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real- world contexts.</li> </ul>	Skills and Procedures	<b>←  </b> I	2	3	
	Mathematical Relationships	1	2	3	<del></del>
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex Kids discover re W/ the activit	vidence UCS ba 103	efore the	Tre gir	10rJ
Jasons 14 4 2 3	Portions of the domain, cludeveloped in the instruction			missing or n	ot well
	Overall Rating	<del>4                                     </del>	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
<ul><li>7.NS.2b</li><li>2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</li></ul>	Important Mathematical Ideas	<del>4  </del> 1	2	3	<del>-</del>
b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers, then $-(p/q) = (-p)/q = p/(-q)$ . Interpret quotients of rational numbers by describing real-world contexts.	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Exercises	vidence is pro	blens an practice	4 900C	1 April 1
Hessa 1.5, 2.1, 2.3	Portions of the domain, clu developed in the instruction	ster, and s	tandard that are		
	Overall Rating	<del>                                      </del>	2	3	

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Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions Summary and documentation of how the domain, cluster, and standard are to add, subtract, multiply, and divide rational numbers. met. Cite examples from the materials. 7.NS.2c Important Mathematical Ideas 2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. c. Apply properties of operations as strategies to multiply and divide rational numbers Skills and Procedures commutative prop. 2 Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): dessons 1.4, 1.5, 2.3, 2.36 Overall Rating

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation met. Cite examples from the			, cluster, and	standard are
<ul><li>7.NS.2d</li><li>2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.</li></ul>	Important Mathematical Ideas	<del>∢  </del> 1	2	3	
d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.	Skills and Procedures	<del>4                                     </del>	2	3	
	Mathematical Relationships	<b>←</b>   1	2	<del> </del> 3	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	vidence /_}ar	good for	visual	12 CO9V)
Lesson 2.1	Portions of the domain, clu developed in the instructio			t are missing	or not well
	Overall Rating	<del>4  </del> 1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Summary and documentation met. Cite examples from the		e domain, clus	ster, and star	ndard are
7.NS.3  Solve real-world and mathematical problems involving the four operations	Important Mathematical Ideas	<b>♦</b>	2	3	
with rational numbers. <sup>1</sup>	Skills and Procedures	1	2	<del></del>	<del>-</del>
	Mathematical Relationships	1	2	3	$ \bigcirc$ $4$
1 Computations with rational numbers extend the rules for manipulating fractions to complex fractions.  Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex		n this		
Lessons 1.2, 1.3, 1.4, 1.5, 2.2, 2.3	Portions of the domain, cludeveloped in the instruction			missing or r	not well
	Overall Rating	<del>4   </del>			

Reviewed By:

Title of Instructional Materials:

## MATHEMATICS: GRADE 7 - EXPRESSIONS AND EQUATIONS - 7.EE

Use properties of operations to generate equivalent expressions.	Summary and documentation met. Cite examples from the			ıster, and stan	dard are
7.EE.1	Important Mathematical Ideas	4 1	ı	I	
Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	important watermatical racus	1	2	3	4
Browning prof.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	<del></del>
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, clu developed in the instructio			e missing or n	ot well
Lesson 2.56	Nota of 50			er ection	r Send
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

## MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATIONS – 7.EE

Use properties of operations to generate equivalent expressions.	Summary and documentation met. Cite examples from the	on of how the domain, cluster, and standard are e materials.
7.EE.2		
Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. For example, $a + 0.05a = 1.05a$ means that "increase by 5%" is the same as "multiply by 1.05."	Important Mathematical Ideas	1 2 3 4
	Skills and Procedures	1 2 3 4
	Mathematical Relationships	1 2 3
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / Ex	vidence ve visual a hapful
	Portions of the domain, clus developed in the instruction	ster, and standard that are missing or not well nal materials (if any):
	Overall Rating	1 2 3 4

Reviewed By:	
Title of Instructional Materials:	

### MATHEMATICS: GRADE 7 - EXPRESSIONS AND EQUATIONS - 7.EE

Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.

#### 7.EE.3

Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

Important Mathematical Ideas

Skills and Procedures



Mathematical Relationships



Summary / Justification / Evidence

Indicate the chapter(s), section(s), and/or page(s) reviewed.

dessons 1.1-1.5 dessons 2.1-2.3 dessons 4.1-4.4 Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any):

Overall Rating



	Reviewed By:				
	Title of Instructional Materia	ls:			
MATHEMATICS: GRADE 7 – EXPRESSIONS AND EQUATION	DNS - 7.EE				
Solve real-life and mathematical problems using numerical and algebraic expressions and equations.	Summary and documentat met. Cite examples from the			ster, and stand	dard are
7.EE.4a					
		1	2	3	
p(x + q) = r, where $p$ , $q$ , and $r$ are specific rational numbers equations of these forms fluently. Compare an algebraic solar arithmetic solution, identifying the sequence of the operation.	Solve Skills and Procedures lution to ations	1	2	3	<b>—</b>
54 cm. Its length is 6 cm. What is its width?	Mathematical Relationships	1	2	3	<b>—</b> 4
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E Good Visuals Activities	ividence of Yead-	world of	PS madric	7
dessons 2.4-2.6	Portions of the domain, cludeveloped in the instruction	ıster, and st	andard that are		
ve real-life and mathematical problems using numerical and ebraic expressions and equations.  E.4a  Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.  a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$ , where $p$ , $q$ , and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?	Overall Rating	1	<del></del>	3	

Reviewed By:	
Title of Instructional Materials:	

#### MATHEMATICS: GRADE 7 - EXPRESSIONS AND EQUATIONS - 7.EE

Summary and documentation of how the domain, cluster, and standard are Solve real-life and mathematical problems using numerical and met. Cite examples from the materials. algebraic expressions and equations. 7.EE.4b Important Mathematical Ideas 4. Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. b. Solve word problems leading to inequalities of the form px + q > rSkills and Procedures or px + q < r, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and Mathematical Relationships describe the solutions. Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well developed in the instructional materials (if any): rdessm z.tob ittle on red work Overall Rating

Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.	Summary and documentation of how the domain, cluster, and standard ar met. Cite examples from the materials.				
7.G.1					
Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	Important Mathematical Ideas	1	2	3	
	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	
	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Jessons 5.4 + 5.46	Portions of the domain, clus developed in the instruction	ster, and stand stand	andard that are s (if any):	missing or r	not well
	Overall Rating	<b>←</b> }	2	3	

The Charles A. Dana Center

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Reviewed By:	
Title of Instructional Materials:	

MATHEMATICS: GRADE 7 - GEOMETRY - 7.G

Draw, construct, and describe geometrical figures and describe the relationships between them.	Summary and documentation met. Cite examples from the			ster, and standard	dare
7,G,2	Important Mathematical Ideas	4 1	ı	1	7
Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	important mausematical ideas	1	2	3	4
	Skills and Procedures	1	2	3	$\frac{1}{4}$
	Mathematical Relationships	1	2	<del></del>	
	Summary / Justification / E	vidence			•
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Smulactivi	in A		11 Flatect	
p. 195, 198, 199, 206, 424-426 Additional	Portions of the domain, clu developed in the instruction			missing or not w	vell
Topic #2	Overall Pating				- W-7-1
	Overall Rating	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Draw, construct, and describe geometrical figures and describe the relationships between them.	Summary and documentation of how the domain, cluster, and stand met. Cite examples from the materials.			
7.G.3				
Describe the two-dimensional figures that result from slicing three- dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.	Important Mathematical Ideas	1 2 3		
	Skills and Procedures	1 2 3		
	Mathematical Relationships	1 2 3 4		
	Summary / Justification / Ev	vidence		
Indicate the chapter(s), section(s), and/or page(s) reviewed.				
Lesson 6.1	Portions of the domain, cluded developed in the instruction	ster, and standard that are missing or not well nal materials (if any):		
	Overall Rating	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		

Reviewed By:	
Title of Instructional Materials:	

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Summary and documentation of how the domain, cluster, and stand met. Cite examples from the materials.				dard are	
7.G.4	Important Mathematical Ideas		•	<u> </u>		
Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.	Important mathematical fueas	1	2	3	4	
	Skills and Procedures	1	<del></del>	1	4	
	Mathematical Relationships	<del>-                                     </del>	2		4	
	Summary / Justification / Ev	/idence				
Indicate the chapter(s), section(s), and/or page(s) reviewed.						
Jesson 6.26	Portions of the domain, cluded developed in the instruction			e missing or no	t well	
	Not a lot a		*tice			
	Overall Rating	1	2	1	<del> →</del>	

Reviewed By:	
Title of Instructional Materials:	

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				iard are
7.G.5	Important Mathematical Ideas	4-1			
Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.		1	$\bigcup_{2}^{1}$	3	4
	Skills and Procedures	1		3	4
	Mathematical Relationships	1		3	<b>→</b> 4
	Summary / Justification / Ev	/idence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
i a	Portions of the domain, clus developed in the instruction	ster, and nal mater	standard that are	missing or no	ot well
Additional Topic 1		1	Ary Jittle	Boque	is stions
	Overall Rating	1	1 2	3	— <del> </del> → 4

Reviewed By:	
Title of Instructional Materials:	

Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.				ndard are
7.G.6	5 5 N 5 1				
Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.	Important Mathematical Ideas	1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
dessons 6.2, 6.4, 6.6,	Portions of the domain, clu developed in the instruction			e missing or	not well
7.1, 7.3, 7.5					
	Overall Rating	<b>♦  </b>	<del> </del> 2	3	<u></u>

39

Reviewed By:		
Title of Instructional Materials:		

Use random sampling to draw inferences about a population.	Summary and documentati met. Cite examples from th		ne domain, clus	ster, and stand	ard are
7.SP.1  Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.	Important Mathematical Ideas Skills and Procedures		2	3	
	Mathematical Relationships	1	2	3	—————————————————————————————————————
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E  Texting activ  app i 9000  Portions of the domain, clu	ity is a visual	indard that are	eal-life U/SOMP missing or no	i well
Lessons 8.4 + 8.46	developed in the instructio	nai materiais	s (if any):		<b>→</b>

Reviewed By:	
Title of Instructional Materials:	

Use random sampling to draw inferences about a population.	Summary and documentation of how the domain, cluster, and standar met. Cite examples from the materials.				ndard are
7.SP.2	Important Mathematical Ideas	4			
Ise data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or imulated samples) of the same size to gauge the variation in estimates in predictions. For example, estimate the mean word length in a book by andomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.		1	2	3	4
	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
	Portions of the domain, clu developed in the instruction			e missing or	not well
Jessons 2.4 + 8.46					
	Overall Rating	<del>{ </del>	<del> </del> 2	3	<b></b>

41

Reviewed By:	
Title of Instructional Materials:	

Draw informal comparative inferences about two populations.	Summary and documentati met. Cite examples from the			ster, and star	ndard are
7.SP.3					
Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm	Important Mathematical Ideas	1	2	3	
greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 8,46	Portions of the domain, clu developed in the instruction	ster, and st	andard that are s (if any):	missing or r	not well
	Overall Rating	<b>4-</b>			
	***************************************	1	2	3	4

Reviewed By:	
Title of Instructional Materials:	

Draw informal comparative inferences about two populations.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.			uster, and standard are
7.SP.4	Important Mathematical Ideas	4 1	1	
Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter	Important Mathematical races	1	2	3 4
of a fourth-grade science book.	Skills and Procedures	<b>←</b>	2	1 4
	Mathematical Relationships	<del>-   -</del>	<del></del>	
Indicate the chapter(s), section(s), and/or page(s) reviewed.	Summary / Justification / E	mi Dj	rison ex box and	griples Linkisker plot
E/6300 7.46	Portions of the domain, clu developed in the instructio	ıster, an	id standard that a	re missing or not well
	Overall Rating	<del>                                      </del>	2	3

43

Reviewed By:	
Title of Instructional Materials.	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the			ster, and sta	ndard are
7.SP.5				, , , , , , , , , , , , , , , , , , , ,	
Understand that the probability of a chance event is a number between 0	Important Mathematical Ideas	<del>                                      </del>			<del>(+)</del>
and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely,		1	2	3	4
and a probability near 1 indicates a likely event.	Skills and Procedures	4			<del></del>
		1	2	3	4
Cortain/impossible					
10110H/1011	Mathematical Relationships	4	<u> </u>		
		1	2	3	4
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 9.1	Portions of the domain, cluded developed in the instruction			missing or	not well
	Overall Rating			er ann an	
	Overall Nathry	<del>                                     </del>		<del></del>	<del></del>
		1	2	3	4

Revie	ewed By:		
Title	of Instructional Materials	:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the		domain, clus	ter, and stand	lard are
7.SP.6  Approximate the probability of a chance event by collecting data on	Important Mathematical Ideas	4			<b>1</b>
the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200		1	2	3	4
times.	Skills and Procedures	1	2	3	4
	Mathematical Relationships	1	2	3	4
Indicate the chapter(a) continues and/or page(a) reviewed	Summary / Justification / Ev	vidence	112/ E	de la	
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 9,3	Portions of the domain, cluded developed in the instruction			missing or no	t well

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.		ary and documentation of how the domain, cluster, and standard ar ite examples from the materials.			ndard are
7.SP.7a					
<ol> <li>Develop a probability model and use it to find probabilities of events.         Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.     </li> </ol>	Important Mathematical Ideas	1	2	3	4
a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.	Skills and Procedures	1	2	3	<b>→</b> 4
	Mathematical Relationships	1	2	3	<del></del>
	Summary / Justification / E	/idence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 9,2	Portions of the domain, cluded developed in the instruction			missing or r	not well
	Overall Rating	<del>-  </del>	2	<del></del>	

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation of how the domain, cluster, and standard are met. Cite examples from the materials.				
7.SP.7b					
<ol> <li>Develop a probability model and use it to find probabilities of events.</li> <li>Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</li> </ol>	Important Mathematical Ideas	1	2	3	4
b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely	Skills and Procedures	1		3	<del></del>
based on the observed frequencies?	Mathematical Relationships	1	2	3	—— <del>  →</del>
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Hesson 9,2	Portions of the domain, cludeveloped in the instruction			missing or no	t well
	Overall Rating	<del>                                      </del>		3	

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation of how the domain, cluster, and standard met. Cite examples from the materials.		ndard are		
7.SP.8a					
8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.	Important Mathematical Ideas	<b>♦  </b> 1	2	3	4
a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.	Skills and Procedures	<b>↓</b>	<del> </del> 2	3	<del></del>
	Mathematical Relationships	<del>4                                     </del>	2	3	<b>→</b>
	Summary / Justification / E	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
Lesson 9.4	Portions of the domain, cluster, and standard that are redeveloped in the instructional materials (if any):		missing or	not well	
	Overall Rating	<b>4</b> J	Į.	1	, disting
		1	2	3	4

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Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate probability models.	Summary and documentation met. Cite examples from the			ster, and sta	andard are
<ul><li>7.SP.8b</li><li>8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</li></ul>	Important Mathematical Ideas	<del>4  </del> 1	2	3	4
b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., "rolling double sixes"), identify the outcomes in the sample space which compose the event.	Skills and Procedures	1	2	3	
	Mathematical Relationships	1	2	3	4
-	Summary / Justification / Ev	vidence			
Indicate the chapter(s), section(s), and/or page(s) reviewed.					
desson 9.4	Portions of the domain, cluster, and standard that are developed in the instructional materials (if any):		missing or not well		
	Overall Rating	<b>∢</b> [ 1	2	3	

Reviewed By:	
Title of Instructional Materials:	

Investigate chance processes and develop, use, and evaluate Summary and documentation of how the domain, cluster, and standard are probability models. met. Cite examples from the materials. 7.SP.8c Important Mathematical Ideas 8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. c. Design and use a simulation to generate frequencies for compound events. For example, use random digits as a simulation tool to Skills and Procedures approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood? Mathematical Relationships Summary / Justification / Evidence Indicate the chapter(s), section(s), and/or page(s) reviewed. Portions of the domain, cluster, and standard that are missing or not well p. 404-405 developed in the instructional materials (if any): Overall Rating